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ABSTRACT

The study was undertaken to identify the kinds of information that the Oklahoma public wants about vocational education. Two data collection methodologies were used, the Delphi Technique and task force procedure. Participants were 240 volunteers from a statewide master list of 653 persons selected as representative. After four meetings the task force sample of 26 volunteers prepared a list of priorities and formulated recommendations for vocational information needs. The remaining persons became the Delphi sample, whose opinions were surveyed through mailed questionnaires, without personal contact. Although any conclusion is premature and should be tested, the major difference in the lists developed by the two methods appear to be: the task force participants, who received more information about vocational education during the course of the study, listed what the general public should need if they knew what was available while the Delphi priorities were more in line with what the general public thought its needs were for vocational information. Throughout the report are tables describing: the task force participants and their priority groupings, Delphi respondents and rank order of information concepts, matched task force and Delphi items, and staff hours and costs for the study. Appended are the master list survey, correspondence, and the Delphi instruments and responses. (Author/MF)

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A STUDY OF THE NEEDS OF OKLAHOMA CITIZENS FOR INFORMATION ABOUT VOCATIONAL-TECHNICAL EDUCATION

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U.S. DEPARTMENT OF HEALTH,
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Stillwater, Oklahoma
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The Problem

The passage of the Vocational Education Act of 1963 has resulted in dramatic growth in vocational enrollments in Oklahoma. During the past five years, enrollments have increased by 23 percent. Such growth has increased the complexity of vocational education, e.g., enrollments in cooperative vocational education, which requires close coordination between the school and industry, has increased 44 percent in the past five years.

As the vocational education system becomes more complex, it becomes increasingly important that good communications exist between the vocational educator and the lay public if the public is to continue support for the vocational programs--and if the public is to make effective use of the vocational programs. The problem, then, is to identify the kinds of information needed by the general public as it relates to support and effective use of vocational programs.

The objective of this study is to identify the kinds of information the public wants about vocational-technical education. A basic assumption of the study is that what people want to know is what they will use in supporting and making effective use of vocational education in Oklahoma. This study does not attempt to test the assumption, but rather, to describe information variables. The results should have two uses: (1) to give direction to State Department staff concerned with making information available to the general public, and (2) to identify information variables for use in further research relating to the problem.

A Problem Within the Study

After identifying the objective of the study, staff from the Division of Research, Planning, and Evaluation saw the opportunity to test two data collection methodologies. The question of the study is, "What do the people of Oklahoma want to know and need to know about vocational-technical education?" The problem within the study is: "What methodological approach will elicit the best response to this question in terms of representativeness of the population, usefulness to the staff, cost, and time involved?"

The Delphi technique was compared with a task force procedure; therefore, the remainder of this report will have duplicate methods, results, and recommendations sections with regard to the study of information needs. A final section will speak to the comparison of results between the two methods.

Participants in the Two Methods

Participants in the two methods were volunteers selected from a master list of Oklahoma citizens compiled by Division staff for use in the study. No efforts were made to obtain a random sample; however, efforts were made to ensure that the participants were representative of a wide range of occupations, and that all geographic areas of the state were represented.

The master list was prepared by sending a survey form to 41 Chambers of Commerce in communities throughout the State. (The survey form is in Appendix A.) These communities were selected to represent all geographic areas and all sizes, (large, medium, and small) of communities. Of the 41 Chambers contacted, 29 completed the survey form.

The survey form listed fourteen occupational categories. A representative of each Chamber of Commerce was asked to list the names of individuals in each occupational category who might be willing to participate in the research. Only one restriction was placed on participants: people associated with vocational programs were excluded from participation.

The survey resulted in the identification of 653 persons broadly representative of the Oklahoma population. These people were sent an introductory letter describing the Delphi and Task Force methods and the purpose of the study, and invited them to participate in the project. The response to the letter indicated 240 individuals would be willing to participate in at least one of the two methods.

The Task Force Study

Sample and Participants:

The Task Force participants were selected from the list of persons who were identified as willing to participate in the Task Force method. Selection was stratified by sex, occupational category, area of the State, and size of city. The selection process produced a heterogeneous group of 26 persons equally divided with regard to sex and areas of the State. It was not possible to select people who exactly met all the criteria--which resulted in small towns being over-represented and in professional people being more heavily represented than other occupational areas. Only 16 of the 26 selected persons actually participated in the Task Force meetings. The sample of actual participants was reasonably representative in all strata. Table I lists the participants by sex, occupation, city and size, and economic planning region.

Task Force Meetings:

The Task Force met four times at approximately six-week intervals from December 14, 1973, to April 19, 1974. There was an average of eleven participants present at each meeting. Because of its central location, Oklahoma City was chosen as the site for two meetings. A third meeting was held at Central Oklahoma Area Vocational-Technical School in Drumright. The purpose of this meeting was to acquaint the members with an area school and to introduce participants to a "Press Day." The fourth meeting was held at the State Department of Vocational and Technical Education in Stillwater.

TABLE I
TASK FORCE PARTICIPANTS

NAME	SEX	OCCUPATION	CITY	CITY SIZE	PLANNING REGION
Jim Duffey	M	Doctor	Wilburton	Small	Southeast
DeLaney Bennett	M	Clergy	Oklahoma City	Large	Oklahoma City
Glen Phillips	M	Carpenter	Guymon	Medium	Northwest
John Mantooth	M	Service	Purcell	Small	SW Central
Mark Stansberry	M	Student	Elk City	Medium	Southwest
Lew Wamsley	M	Public Utility	Bartlesville	Large	Tulsa
Daniel Heltzel	M	Accountant	Sulphur	Small	South Central
Philip Redwine	M	Attorney	Norman	Large	Oklahoma City
William Jeffrey	M	Farmer	El Reno	Large	Oklahoma City
Ruth Holmes	F	Housewife	Cushing	Medium	East Central
Julia Ferguson	F	Housewife	Sallisaw	Small	Mid-East
Jo Ellen Coker	F	Housewife	Alva	Medium	Northwest
Ann Goss	F	Housewife	Weatherford	Medium	Southwest
Maurene Stuckey	F	Teacher	Weatherford	Medium	Southwest
Sara Eaton	F	Teacher	Miami	Large	Northeast
Edith Hudson	F	Teacher	Ada	Large	South Central

The first meeting was a general orientation to vocational-technical education for the participants. It also provided the opportunity for members to become acquainted with each other. The meeting began with some introductory remarks about the nature of vocational-technical education by Dr. Bill Stevenson, Assistant State Director and Head of the Division of Research, Planning, and Evaluation. Dr. Francis Tuttle, State Director of Vocational and Technical Education, talked about the importance of the Task Force's work and the general need for this kind of information. Dr. Stevenson then discussed the specific nature of the Task Force method, i.e., the contrasts and similarities between it and the Delphi method, the objectives to be accomplished, and the research implications for the Task Force's findings.

The remainder of the first meeting was devoted to answering participants' questions and a discussion of the problem which the Task Force would attempt to solve. General literature about vocational education was distributed, and a film was shown to further acquaint the members of the Task Force with the issues to be studied.

At the beginning of the meeting, an information and interest survey was distributed to determine the scope of the participants' knowledge about vocational education and their areas of interest. The results of this survey are difficult to interpret, but the general statement can be made that although the participants' interest was high and covered almost all areas of the field, their knowledge about vocational education was extremely limited in most areas. The questions asked at the meeting evoked stimulating discussion about the whole vocational-technical area--including such topics as funding, entrance requirements, program stipends and scholarships, curriculum, materials, area schools, skill centers, certification requirements, job demand, and cost per pupil. The meeting closed with the request that participants discuss vocational education with their friends and to try to determine which areas they were most interested in learning about.

The second meeting was held at Central Oklahoma Area Vocational-Technical School in Drumright. The members of the Task Force toured the school with representatives of the local press, and attended a press conference in which the local school administrators provided the press with information about the school's program and students. The afternoon session was focused on some specific issues--public relations, school dropouts, and area schools. Near the end of the meeting, the discussion shifted to the principal problem of the Task Force, "What does the public want to know about vo-tech education?"

Participants were asked to list what they perceived to be the five most important information needs to bring with them to the next meeting.

Attendance at the third meeting, held in Oklahoma City, declined to only eight participants. However, despite low attendance, this meeting was the most productive in terms of output. This meeting concentrated on developing priorities for information needs and a set of recommendations for the State Department. Table II presents a list of these priorities. This list includes the information which the Task Force concurs that the State Department needs to make available to the public. The list is not rank ordered, but rather, is grouped into three sections--high priority, moderate priority, and low priority.

The fourth and final meeting was held in Stillwater. The primary purpose of this meeting was to review the priority groups and to review some specific recommendations and conclusions. The priority grouping (as exhibited in Table II) was accepted unanimously by the Task Force; however, several recommendations were revised and additions were made and were incorporated into their final report. An effort was made to determine which of the high priority items should be attacked first. Participants agreed that improving the image of vo-tech education was the most pressing problem, but could not agree on which of the four remaining high priority items should be ranked second in importance. It was their consensus that the problem of image pervades all other items of information mentioned.

TABLE II
TASK FORCE PRIORITY GROUPING

High Priority

1. Improve image of vocational-technical education.
 - a. certification or award degree for vocational training
2. What kinds of jobs do vo-tech graduates receive? (follow-up)
3. Who can attend an AVTS school?
4. Aid to students wanting vocational or technical training
 - a. G.I. bill
 - b. scholarships
 - c. vocational rehabilitation
 - d. basic educational opportunity grants
 - e. other sources of aid
5. Cost and benefits of vo-tech education to student-and community

Moderate Priority

1. Many uses of vocational-technical training
2. Which industries support and use vocational-technical training programs?
3. Economic returns of vocational-technical education programs to student and community
4. What are the educational aspects of vocational-technical education in addition to skill training?
5. Information about retraining (adult education)
6. Entry level requirements for vocational-technical education
7. Information on specific courses

Low Priority

1. Use simple terminology and information
 2. Training and assistance to industry
 3. Qualifications and background of vocational-technical teachers
 4. Relationship of local school to vocational-technical school
 5. Residency requirements and tuition
-

Conclusions and Summary of Present Situation:

The Task Force reached three main conclusions: (1) despite publicity efforts, vocational and technical education does not have a positive image. The public feels vo-tech is for inferior students, non-college students, or for everyone "except my child," (2) the public knows very little about vocational-technical education, and (3) the public is interested in vo-tech at the local level and the impact of training on individual students. Thus, the Task Force would conclude that the image of vo-tech must be improved, and the main thrust of this effort must be in the local community.

The Task Force formulated the following recommendations:

Recommendation 1. The public needs information about local vo-tech programs. The Task Force feels that brochures are ineffective for reaching the majority of the public. As an alternative, it suggests that a full-time public relations person be assigned to each area school. This person would have responsibility for providing the local media, i.e. radio, press, television, theaters, and interested civic organizations, including Chambers of Commerce, Elks Clubs, church groups, Kiwanis Clubs, and Lions Clubs, with information about the vocational programs available in that area.

Recommendation 2. There are many civic-minded people in each community who would be eager to participate in voluntary vo-tech public information programs if they had the opportunity. Therefore, it is suggested that the AVTS director, or someone designated by him, coordinate voluntary programs in the local area. The area school is chosen only because of its central location. The key element in this program is that it be conducted at the local level where local people can have access to personal contact with a local official.

Recommendation 3. Local non-vocational teachers and counselors could be an excellent source of vo-tech information. Unfortunately, non-vocational teachers and counselors are usually poorly informed about the purpose, nature, and quality of vo-tech programs. It is recommended that some means of re-education for these teachers be adopted, e.g., a weekend seminar on vocational education, a one-hour summer short course in vo-tech at a local college, or a weekly evening program.

Recommendation 4. The Task Force feels that the public lacks knowledge in the areas of job demand, job training, job availability, entry level skills, and retraining programs. Therefore, the Task Force recommends that the State Department take some of the following steps to provide this information:

- (1) Provide a toll free number which the public can call between the hours of 8:00 a.m. and 9:00 p.m. Monday through Saturday. The vo tech representative should be able to provide the caller with information in the areas indicated above. The Task Force feels that the availability of the telephone line is very important, because most people are easily frustrated in their search for information.
- (2) A toll free number for each economic area could be provided featuring a recording of all the job openings for that week in that area of the state. Since this would lower their advertising costs, local businesses would probably be very cooperative in such an effort.
- (3) Mobile units presently operating in sections of the state should be available throughout the state. These mobile units could provide information about job demand and recruit trainees for the local programs. These mobile units or any other representative should work closely with local industry to both assess industrial needs and to provide management and employees with information about vo-tech training programs.
- (4) Job demand figures could also be presented in the local newspapers, similar to a stock market report.

Recommendation 5. Several members of the Task Force have contacted the local area vocational-technical school superintendent or have been contacted by him. These members have found that many of these schools have similar problems. Therefore, it is recommended that the AVTS superintendents be surveyed to discover what they consider to be their most pressing problems. If there is sufficient overlapping of problems between schools, it is recommended that they be handled by a new statewide program at the state level.

In the course of their discussions, the Task Force suggested some interesting solutions to specific vo-tech information problems. Some of these may prove useful and are listed below:

1. Local school programs, i.e., course offerings, should be published in the local newspapers in the fall and spring of each semester. This would give the local community a closer look at what is being done in the vo-tech programs and might entice people to take a course in which they are interested.

2. A course in parenthood, i.e., how to raise your children, could be offered at the local vo-tech school.
3. Spot announcements on radio and television could be used to provide the public with information about demand, types of skills required, and availability of training for a particular job.
4. The terminology in public information brochures should be simple and precise because the public is often confused about the meaning of education-related terms.
5. The dropout problem is so critical that people in every local community should be organized to assist in reducing it.
6. A long training program often seems insurmountable to aspiring trainees. Also the cost of a long program may be prohibitive. Dividing the course into three or four levels and charging the student for one level at a time might make a program much more attractive. This would also allow the trainee to exit and re-enter training as his resources would allow.
7. One way to eliminate the stigma of vo-tech education is by offering a craftsmanship degree or certification.

The Task Force also developed several questions which might be of further research interest. They are:

1. Is there a relation between what people want to know about vocational-technical education and what they need to know about vocational-technical education?
2. To what extent are the information needs of the public being met?
3. Why do people drop out of vocational-technical programs, and is this the same reason that people drop out of school?
4. Who is more knowledgeable about vocational-technical programs, parents or students?
5. Do long term residents of a community know more about vocational education than newly arrived residents?

The Delphi Study

The Delphi technique is an iterative procedure for determining the consensus of a group of subjects with regard to some issue. The Delphi has been used in many different situations, e.g., Helmer (1966) used the Delphi to collect opinions on the probable future dates of social and technological events. The purpose of the Delphi technique is to find the consensus of a group of subjects on an issue without bringing the subjects into personal contact with each other. At the beginning of the Delphi technique the group members will have many different opinions about the issue in question. At the completion of the Delphi the group members should have reached consensus on the issue.

In its most basic form the Delphi technique consists of at least three different instruments which, in the present study, will be referred to as Delphi I, Delphi II, and Delphi III. The number of instruments necessary to complete the technique depends on how quickly the group reaches consensus. If the group reaches consensus early, then only three instruments are necessary. If the group has difficulty reaching consensus, then many instruments may be needed. The purpose of these additional instruments is to present the divergent opinions and to persuade the group or the divergent individuals to change their position. It is possible that consensus may never be achieved.

The reader should note that individual group members never meet face to face. The only contact group members have with each other is through the Delphi instruments, which are usually mailed to group members. Since there are no face to face interactions, many types of group pressure such as a dominant personality are eliminated. Group members are thus more free to express their own opinion.

The Participants:

As indicated earlier, 240 individuals from a master list of 653 had volunteered to take part in the Information Needs Study. The Task Force sample of 26 was drawn from the list of volunteers. The remaining 216 persons became the Delphi sample. Tables III, IV, and V indicate how the participants were grouped by occupation, sub-state planning region, size of community, and sex. Of the 216 in the sample, 101 responded to Delphi I, 76 responded to Delphi II, and 70 responded to Delphi III.

TABLE III

RESPONDENTS TO DELPHI I AND DELPHI III
GROUPED BY OCCUPATION AND SEX

Occupation	Male	Delphi I Female	Total	Male	Delphi III Female	Total
Farmer	9	-	9	6	-	6
Manager (Non-owner)	11	-	11	10	-	10
Businessman	11	-	11	9	-	9
Doctor	4	-	4	2	-	2
Lawyer	3	-	3	1	-	1
Clergy	8	-	8	4	-	4
Teacher	4	1	5	3	-	3
Skilled Laborer	2	-	2	2	-	2
Manufacturer	15	-	15	10	-	10
Housewife	-	3	3	-	2	2
Student	2	1	3	-	-	-
Clerical	1	7	8	1	5	6
Public Utilities	17	-	17	11	-	11
Service	2	-	2	2	-	2
Unidentified	-	-	-	-	-	2
Total	89	12	101	61	7	70

TABLE IV
RESPONDENTS TO DELPHI I AND DELPHI III
GROUPED BY SIZE OF COMMUNITY

Community Size	Delphi I	Delphi III
Less than 6,000 population	24	15
6,000 to 11,000 population	36	23
Over 11,000 population	41	30
Unidentified	-	2

TABLE V
RESPONDENTS TO DELPHI I AND DELPHI III
GROUPED BY SUB-STATE PLANNING REGION

Planning Region	Delphi I	Delphi III
Northeast	5	3
Mid-east	5	2
Southeast	2	2
South Central	14	12
East Central	-	-
Tulsa SMSA	11	6
North Central	15	13
Oklahoma City SMSA	22	18
Southwest Central	10	4
Southwest	12	5
Northwest	5	3
Unidentified	-	2

Instruments:

The Delphi study used three instruments identified in this narrative as Delphi I, Delphi II, and Delphi III. The instruments, together with their cover letters, are exhibited in Appendix B.

On Delphi I, all of the participants were asked, "List up to ten questions which you feel the public would like to have answered about vocational and technical education in Oklahoma." The questions solicited from the 101 respondents to Delphi I were listed to comprise a list of 791 questions. These questions provided the best description of the public information need. An analysis of the list disclosed many duplications, some redundancies, and some questions too specific to be useful except in identifying a general information need. Questions in the list were grouped so that the list could be reduced to thirty-five general areas which accurately described the public information needs. These thirty-five concepts formed Delphi II.

As an additional check on the representativeness of the 35 concepts to the respondents' initial questions, Delphi II asked the respondents to add any concepts which they believed had been omitted. Only four of the 76 respondents added any concepts (See Appendix C). All of these concepts could be subsumed under a concept already in Delphi II so none of these concepts were added to Delphi III.

Delphi II asked the participants to "rank each concept on an 11-point continuum ranging from most important (1) to least important (11) . . ." This rank ordering was used to determine which concepts needed to be publicized the most. The rank order was computed from the 76 Delphi II instruments returned by calculating the mean average of the responses for each of the 35 concepts.

An adjunct to the Delphi process was added to Delphi II for the purpose of further defining the public need for information about a given concept. Respondents were asked to check the level or levels of information needed for each of the 35 concepts in terms of "State," "Local," "General," and "Specific." These responses were not used in developing Delphi III, but were simply totaled for each concept.

Delphi III listed the 35 concepts in rank order, from most important to least important, together with the average rating obtained on Delphi II. The participants were instructed, "If you think a concept should be ranked significantly more or less important, please list the rank number on the last page, and indicate why you think the concept should be placed higher or lower in priority."

The purpose of Delphi III was to determine the amount of agreement between the participants. Usually, the Delphi technique is continued until all participants agree; however, the present study was terminated after the 70 Delphi III responses were returned, even though consensus was not achieved. Agreement among participants was great enough that little additional information would have been gained by striving for 100% agreement. Sixty-one of the seventy respondents were in complete agreement with the group opinion. Nine respondents wanted changes made in Delphi III (See Appendix C); however, there was not sufficient agreement among the dissenters to warrant a fourth Delphi.

Results:

The Delphi study produced two different kinds of results. First, it produced a priority ranking of the vocational information needs of the Oklahoma public. Secondly, it produced a description of the level of information the public wanted on each concept.

Table VI lists the 35 concepts in rank order of importance together with the average rating obtained in Delphi II. The purpose of the rank ordering was to establish a hierarchy of priorities; however, the ratings range only from most important (2.3) to moderately important (7.1). This small range creates a problem in setting priorities even though the respondents were able to agree that some concepts were more important than others.

The principal author developed criteria for dividing the concepts into priority clusters based on breaks in the continuum of concept ratings. The ratings range from 2.27 to 7.13 with the average increment (difference between two adjacent concepts) of .14 scale units. It was arbitrarily decided that an increment of .42 scale units between two adjacent concepts was large enough to declare a break in the continuum; e.g., the difference between the ratings of concepts 31 and 32 is .67 scale units. This difference is much larger than the average difference between concepts. Thus it was concluded that the concepts which fall below this break are different from the concepts which fall above the break.

Using this criterion, there are three breaks in the continuum: between concepts 3 and 4 (.42 scale units), between concepts 26 and 27 (.52 scale units), and between 31 and 32 (.67 scale units). A fourth break between concepts 7 and 8 (.27 scale units) was declared to reduce the size of the largest group. This fourth break did not meet the arbitrary requirements for a break but was included because it was the next largest difference between adjacent concepts and because it seemed reasonable to partition the continuum at that point.

As indicated in Table VI, the concepts are divided into five priority clusters. The "Highest Priority" cluster includes concepts 1 through 3; the "Moderately High Priority" cluster includes concepts 4 through 7; the "Moderate Priority" cluster has concepts 8 through 26; the "Moderately Low Priority" cluster has concepts 27 through 31; and the "Low Priority" cluster includes concepts 32 through 35.

The concepts in the highest priority cluster are: (1) What vo-tech courses or programs are offered and when; (2) Job placement services; and (3) Job supply and demand. Concept 1 suggests that people are very interested in information about vo-tech programs but have very little knowledge of what is currently offered. It might imply that if the public knew more about vocational programs, they would make better use of the existing programs. Perhaps lack of knowledge, and not motivation, is preventing the public from the most effective use (and support) of vocational education.

Concepts 2 and 3 suggest that the public is very interested in the graduate being able to find employment. Surprisingly, the public seems less concerned that the job be well-paying (concept 12) or that the graduate be able to perform effectively on the job, (concept 16). The reader should not be misled, however, for the graduates' competence and salary are still rated as moderately important, but not as important as obtaining a job.

Table VII presents the level of information the public wants about vocational education. The columns on the left present the number of respondents who wanted information at each of the four levels. There were six non-respondents; therefore, 35 or more would represent a majority of the respondents desiring information at a given level for a given concept. In general, the respondents are more interested in information at both the state and local level. They are more likely to want general information on the least important concepts and rarely want specific information.

TABLE VI

RANK ORDER OF INFORMATION CONCEPTS RATED BY RESPONDENTS

Rank	Average Rating	Concept
<u>Highest Priority</u>		
1	2.27	What vo-tech courses or programs are offered and when
2	2.68	Job placement services
3	2.77	Job supply and demand
<u>Moderately High Priority</u>		
4	3.19	Adult vocational education
5	3.33	Vo-tech programs for the handicapped, retarded, disadvantaged, minority students, and dropouts
6	3.41	Cooperative or on-the-job training opportunities
7	3.45	Entrance and enrollment requirements of vo-tech programs
<u>Moderate Priority</u>		
8	3.62	Financial assistance for vo-tech students
9	3.63	Location of schools offering vocational training
10	3.85	Costs of vocational training to students
11	3.89	Level of job skills learned in vo-tech training
12	3.93	Economic and other benefits to students of vo-tech programs
13	4.11	Resources needed to improve vo-tech education
14	4.12	State and community benefits from vo-tech training
15	4.14	Interactions between business, industry, and vo-tech education
16	4.15	Effectiveness of vo-tech programs in terms of student success
17	4.21	Vocational counseling and student decisions
18	4.27	Curriculum content in vo-tech programs
19	4.38	Vo-tech training as an alternative to a college degree
20	4.40	Definition and main purpose of vo-tech education
21	4.51	Length of programs and other completion requirements
22	4.69	Qualifications and certification of vo-tech education
23	4.73	Vo-tech program contribution to graduation, certification, and licensure of students
24	4.89	Relationship between vo-tech and other public education
25	5.12	Vo-tech information and public relations
26	5.28	Impact of career education on vo-tech education
<u>Moderately Low Priority</u>		
27	5.80	Policies regarding vo-tech education and its relationship to other education
28	5.86	Bases for adding or dropping vo-tech programs
29	5.89	Funding, financing, and cost of vo-tech education to the taxpayer
30	5.99	Availability of student housing at vo-tech schools
31	6.19	Transportation to Area Vocational-Technical Schools
<u>Lowest Priority</u>		
32	6.86	Mobility of vo-tech students
33	7.11	Comparisons of Oklahoma vo-tech programs with other states
34	7.11	Administrative structure of vo-tech education
35	7.13	Numbers and types of students in vo-tech programs

TABLE VII
RESPONDENTS DESIRING INFORMATION AT GIVEN LEVELS

Level of Information				Concept
State	Local	General	Specific	
*44	*58	17	28	What vo-tech courses or programs are offered and when
*52	*57	12	30	Job placement services
*45	*50	26	25	Job supply and demand
*38	*52	20	24	Adult vocational education
*45	*44	23	*36	Vo-tech programs for the handicapped, retarded, disadvantaged, minority students, and dropouts
31	*49	23	28	Cooperative or on-the-job training opportunities
*46	*48	22	28	Entrance and enrollment requirements of vo-tech programs
*44	*44	22	30	Financial assistance for vo-tech students
*49	*48	19	19	Location of schools offering vocational training
*38	*42	26	28	Costs of vocational training to students
32	*39	34	21	Level of job skills learned in vo-tech training
*40	*41	26	21	Economic and other benefits to students of vo-tech programs
*45	*35	32	19	Resources needed to improve vo-tech education
*51	*44	*38	11	State and Community benefits from vo-tech training
*45	*40	*35	23	Interactions between business, industry, and vo-tech education
*51	*35	*38	21	Effectiveness of vo-tech programs in terms of student success
30	*39	28	25	Vocational counseling and student decisions
*37	*44	*40	21	Curriculum content in vo-tech programs
*40	33	*39	24	Vo-tech training as an alternative to a college degree
*44	*37	*36	13	Definition and main purpose of vo-tech education
29	*38	22	25	Length of programs and other completion requirements
*44	26	29	19	Qualifications and certification of vo-tech teachers
*46	29	*36	15	Vo-tech program contribution to graduation, certification, and licensure of students
*39	33	*39	12	Relationship between vo-tech and other public education
*44	*39	*39	13	Vo-tech information and Public Relations
34	19	*45	7	Impact of career education on vo-tech education
*35	26	*37	8	Policies regarding vo-tech education and its relationship to other education
29	24	*35	12	Bases for adding or dropping vo-tech programs
*47	30	*40	11	Funding, financing, and cost of vo-tech education to the taxpayer
28	*35	31	21	Availability of student housing at vo-tech schools
14	*47	22	15	Transportation to Area Vocational-Technical Schools
30	28	*40	4	Mobility of vo-tech students
*35	11	*40	7	Comparisons of Oklahoma vo-tech programs with other states
34	28	*36	10	Administrative structure of vo-tech education
*37	27	*40	7	Numbers and types of students in vo-tech programs

* Majority responses

Conclusions and Recommendations:

The Delphi study did provide a set of explicit priorities which can be used by the State Department of Vocational and Technical Education and by local school districts as a guide for dissemination of vocational information to the general public. There are, however, some limitations that should be noted regarding the priority list. An analysis of Table III indicates that only 18 of the 70 Delphi III respondents were in "blue collar" occupations. Further, only 7 of the 70 respondents were female. One must conclude that the priorities represent, for the most part, only the male, white collar Oklahoma public.

Five recommendations are made as a result of this study:

1. It is recommended that a new survey be taken which would more adequately represent all of the Oklahoma population.
2. Using the Delphi technique allowed the participants to rate most concepts as moderately important. This lack of discrimination between concepts limited the interpretability of the results. It is recommended that a survey technique which forces the respondent to discriminate between concepts be used in future studies.
3. The point has been raised previously that the system of vocational education is not clearly understood. It is recommended that state leadership provide to local vocational staff a clearly defined description of the entire vocational education system. Local staff should be encouraged to develop localized public information within the descriptive framework of the vocational education system.
4. The present study investigated the information needs of the public sector of the vocational education system. It is recommended that future study expand the investigation to information needs of legislators, counselors, non-vocational teachers, and students. The information needs of the entire system should be understood before sweeping changes are made in the existing vocational information network.
5. Concept 1 in the priority listing indicates that the public strongly wants more information about which vocational programs are offered and where. It is recommended that local schools as well as the State Department investigate means of disseminating such information. Several kinds of dissemination programs should be examined, e.g., newspaper listings of local vocational offerings, a toll-free telephone line, or listings on a local cable TV channel.

Comparison of the Two Methods

The results of the Delphi method and the Task Force method will be compared in three different ways: (1) results will be compared descriptively, (2) costs of each method will be compared, and (3) man hours and total time required for each method will be compared.

Results Comparison:

Both the Delphi method and the Task Force method attempted to define the "public information need." It would have been very convenient to be able to compare these definitions statistically and to draw conclusions from the statistical analysis. The major reason why a statistical comparison is inappropriate is that the two definitions do not contain identical terms.

The Delphi produced a list of 35 items while the Task Force produced a list of only 17 items--thus, several items in the Delphi were not represented (or were represented by broader categories) by the Task Force. A panel of three judges equated four Delphi items to Task Force items. Twenty-three Delphi items were rated as similar to or related to items on the Task Force list. If the two lists were identical, a chi-square test of association could have been performed using the priority ranking of each item as a nominal category. Since the two lists are not identical, statistical analyses are not appropriate.

The most appropriate way to compare the results of the two studies is by verbally describing the similarities and differences. Table VIII lists the items as matched by the three judges. On the left are the Delphi items listed by "high," "moderate," and "low" priority. On the right are the Task Force items which the judges considered to be similar to the Delphi items.

Table IX is a contingency table which was constructed from the matched items in Table VIII. Twelve of the thirty-two pairs were in agreement with regard to the priority level of the items. An additional 17 pairs neither disagreed nor agreed, while three pairs were in opposition with regard to the priority level. There were 12 Delphi items for which there was no match by the Task Force--seven of which were rated as low priority items. Because of the nature of the two techniques (Delphi is all-inclusive while the Task Force is selective), it may be considered that the Delphi and Task Force groups were in agreement on the seven low-ranked items. It appears that overall, there is more agreement than disagreement between the two methods.

It is important to note that a major difference between the two sets of participants developed during the course of the study. Initially, both groups were relatively naive about vocational education in Oklahoma. The Task Force participants were supplied with considerable information about vocational education during the course of the study; therefore, they must be considered much more knowledgeable than the Delphi participants. One might conclude that the Delphi priorities are more in line with what the general public thinks is its need for vocational information, while the Task Force priorities are more in line with what the general public should need if they knew what was available. Such a conclusion is premature and should be tested.

TABLE VIII
MATCHED TASK FORCE AND DELPHI ITEMS

Delphi Items	Task Force Items
<u>High Priority</u>	<u>*Priority</u>
1. What vo-tech courses or programs are offered and when	M Information on specific courses
2. Job placement services	None
3. Job supply and demand	H What kinds of jobs do vo-tech graduates receive
4. Adult vocational education	M Information about retraining (adult education)
5. Vo-tech programs for the handicapped, retarded, disadvantaged, minority students, and dropouts	None
6. Cooperative or on-the-job training opportunities	M Which industries support and use vo-tech programs
7. Entrance and enrollment requirements of vo-tech programs	L Training and assistance to industry
	H Who can attend an area vo-tech school
	M Entry level requirements for vo-tech education
	L Residency requirements and tuition
<u>Moderate Priority</u>	
8. Financial assistance for vo-tech students	H Aid to students wanting vo-tech training
9. Location of schools offering vo-tech training	M Information on specific courses
10. Costs of vocational training to students	H Cost and benefits of vo-tech education to student and community
	M Economic returns of vo-tech education to student and community
11. Level of job skills learned in vo-tech training	M What are the educational aspects of vo-tech education in addition to skill training
12. Economic and other benefits to vo-tech students	H Cost and benefits of vo-tech education to student and community
	M Economic returns of vo-tech education to student and community

TABLE VIII--MATCHED TASK FORCE AND DELPHI ITEMS (Continued)

Delphi Items		Task Force Items	
Moderate Priority (Continued)		*Priority	None
13. Resources needed to improve vo-tech education			
14. State and community benefits from vo-tech education		H	Cost and benefits of vo-tech education to student and community
		M	Economic returns of vo-tech education to student and community
15. Interactions between business, industry, and vo-tech education		M	Which industries support and use vo-tech programs
		L	Training and assistance to industry
16. Effectiveness of vo-tech programs in terms of student success		H	What kinds of jobs do vo-tech graduates receive
17. Vocational counseling and student decisions			None
18. Curriculum content in vo-tech programs		M	Information on specific courses
19. Vo-tech training as an alternative to a college degree		M	Many uses of vo-tech training
20. Definition and main purpose of vo-tech education		L	Use simple terminology and information
21. Length of programs and other completion requirements		M	Information on specific courses
22. Qualifications and certification of vo-tech teachers		L	Qualifications and background of vo-tech teachers
23. Vo-tech program contribution to graduation, certification, and licensure of students		L	Relationship of local school to vo-tech school
24. Relationship between vo-tech and other public education		L	Relationship of local school to vo-tech school
25. Vo-tech information and public relations		H	Improve image of vo-tech education
		L	Use simple terminology and information
26. Impact of career education on vo-tech education			None

TABLE VIII--MATCHED TASK FORCE AND DELPHI ITEMS (continued)

Delphi Items	Task Force Items
<u>Low Priority</u>	<u>*Priority</u>
27. Policies regarding vo-tech education and its relationship to other education	L Relationship of local school to vo-tech school
28. Bases for adding or dropping vo-tech programs	None
29. Funding, financing, and cost of vo-tech education to the taxpayer	H Cost and benefits of vo-tech education to student and community
30. Availability of student housing at vo-tech schools	M Economic returns of vo-tech education to student and community
31. Transportation to area vo-tech schools	None
32. Mobility of vo-tech students	None
33. Comparisons of Oklahoma vo-tech programs with other states	None
34. Administrative structure of vo-tech education	None
35. Numbers and types of students in vo-tech programs	None

*Task Force Priorities: H = High, M = Moderate, L = Low.

TABLE IX
CONTINGENCY TABLE OF AGREEMENT AMONG
DELPHI AND TASK FORCE PRIORITIES

Task Force Priority	High	Delphi Priority Moderate	Low
High	2	6	1
Moderate	4	9	1
Low	2	6	1

Cost Comparison:

The Task Force method cost \$899 more than the Delphi method--almost twice as much for data development after the master list was compiled. Assuming that the master list costs would have been a cost related to either method, the Task Force method would have cost 144 percent of the Delphi cost (\$2,936 vs. \$2,037). Table X estimates the costs by activity and for the total project. There are, of course, hidden costs that were not computed, i.e., the costs for the time spent by participants. Participant time comparisons follow in the time analyses; however, considering costs to the RCU, it is concluded that the Delphi method is considerably less expensive.

Staff Hours and Time Comparison:

The Delphi method took 51 more RCU staff hours than the Task Force method. When the hours needed to develop the master lists are added to each, the Delphi method took 124% of the time the Task Force method took. The hidden time, i.e., the time spent by the participants, was estimated. It was not feasible to estimate costs to participants because of their varied backgrounds, e.g., housewife or teacher. The Task Force participants spent four working days in the meetings, or a total of 312 hours. The Delphi participants spent an estimated 20 minutes to complete each instrument or approximately 85 hours to complete the 247 instruments that were returned. In total, the Delphi method takes more staff time while the Task Force method takes much more participant time.

Total time necessary to complete the study can be an important factor to consider in choosing a method. After the master list was compiled, it took approximately five months to complete the report--with four meetings scheduled six weeks apart. Obviously,

TABLE X

RCU STAFF HOURS AND COSTS FOR THE INFORMATION NEEDS STUDIES

Master List Activities	Staff Hours	Costs
Developing Chamber of Commerce sample	20	\$ 80
Visiting 15 Chambers of Commerce	40	750
Surveying Chamber of Commerce sample (developing instrument, printing, and mailing)	5	27
Developing master list from survey	10	30
Surveying 601 citizens on master list (developing instrument, printing, and mailing)	8	153
TOTAL, hours and costs for Master List	83	1,040
Task Force Activities		
Selecting Sample	10	40
Correspondence to participants (printing, mailing, reimbursing, etc., @ \$13/meeting)	8	52
RCU staff time at four meetings, average 19 hours per meeting, average cost \$129 per meeting	76	556
RCU staff travel to 3 meetings @\$28		84
Participant travel, 4 meetings, 39 actual reimbursements		978
Writing and reviewing final report	28	141
Printing and mailing final report	1	45
TOTAL, hours and costs for Task Force Activities	123	1,896
Delphi Activities		
Developing, printing, and mailing Delphi I	6	77
Compiling Delphi I results	40	160
Constructing, reviewing, and typing Delphi II	53	282
Printing and mailing Delphi II	3	29
Compiling Delphi II results	8	32
Printing and mailing Delphi III	3	29
Compiling Delphi II results, developing and reviewing final report	60	343
Printing and mailing final report	1	45
TOTAL, hours and costs for Delphi Activities	174	997
Delphi-Task Force analysis and report	84	604
TOTAL PROJECT COSTS		\$ 4,537

scheduling is flexible and similar results might have been obtained by scheduling meetings one or two weeks apart. The final report might be obtained in two or three months if necessary.

The Delphi method is more time consuming. Considerable staff time was necessary in analyzing the Delphi I results and in developing the Delphi II instrument. In the present study, the 93 hours required to develop Delphi II was spread over several weeks. In addition, a reasonable time (perhaps two weeks) is necessary to allow for mail delivery to and from the participants. In the present study, the Delphi method took approximately nine months to complete because of the lag between the mailing of Delphi I and Delphi II. Given the necessary staff time to analyze Delphi I and develop Delphi II, we estimate that the method could obtain a final report in four or five months.

Conclusions:

If it can be assumed that the Delphi and the Task Force methods are approximately equivalent for assessing the "public information need," then it seems warranted to conclude that these methods produce slightly different results. The Delphi method provides information on the public information needs of relatively naive subjects. The Task Force method provides information on the public information needs of relatively naive subjects who have been supplied with vocational information.

When these studies were planned, it was assumed that they would both be measuring the same quantity; however, in retrospect, it seems that these methods were measuring slightly different quantities. Not only were the Task Force participants more knowledgeable with regard to vocational education, but they were also encouraged to discuss the information needs with others in the lay public--with the result that their inputs at the Task Force meetings and to the resulting priorities were the result of some indepth considerations. The Delphi participants, on the other hand, gave responses "off the top of their heads" in response to the three Delphi instruments. The authors conclude that the two samples were initially the same in their information needs, but that the information needs of the Task Force changed as they became more knowledgeable.

Summing up, the Delphi technique is less costly, more time consuming to the research staff, and probably takes more time to arrive at a result. The Task Force method is more costly, more time consuming for the participants, but can more quickly obtain results.

We should add that the degree of naivete' depends on the population and sample since many studies have been completed by each technique with the use of "experts" in the sample and population. The Delphi technique probably has more researcher bias present due to necessity of reducing the first responses to a set of variables. The Task Force technique, on the other hand, has more "personality" bias which may come from the research staff or from members of the task force.

Information obtained through each technique can be valuable; however, results may and probably will differ. We therefore recommend that the researcher consider all the constraints that may be present and choose the method which best meets with the constraints.

APPENDIX A

THE MASTER LIST SURVEY

INFORMATION NEEDS STUDY

City		Interviewee	
OCCUPATION		Title	NAME-ADDRESS
Farmer		1.	
		2.	
Businessman		1.	
		2.	
Professional	<u>Doctor</u>	1.	
	<u>Lawyer</u>	1.	
	<u>Clergy</u>	1.	
	<u>Non-Vocational Teacher</u>	1.	
Skilled Laborer		1.	
	(Carpenter, Plumber, Mechanic, Welder, etc.)	2.	
Manufacturer Executive		1.	
		2.	
Service (Waitress, Salesperson, etc.)		1.	
		2.	

Return to: Bill Stevenson, Head
 Division of Research, Planning, and Evaluation
 State Department of Vocational and Technical Education
 1515 West Sixth Avenue
 Stillwater, Oklahoma 74074

INFORMATION NEEDS SURVEY
Page Two

Manager (Non-owner)

1. _____

2. _____

Housewife

1. _____

2. _____

Student (High School)

1. _____

2. _____

Clerical

1. _____

2. _____

Public Utilities

1. _____

2. _____

Communities Surveyed

Region 1

Miami 13,880
Vinita 5,847

Region 2

Sallisaw 4,888

Region 3

Idabel
Wilburton

Region 4

Ada 14,859
Durant 11,118
Pauls Valley, 5,769
Sulphur 5,158
Tishomingo 2,663

Region 5

None

Region 6

Bartlesville 29,683
Broken Arrow 11,787
Sand Springs 10,565

Region 7

Alva 7,440
Enid 44,986
Ponca City 25,940

Region 8

Clinton 8,513
El Reno 14,510
Guthrie 9,575
Norman 52,117
Oklahoma City 368,856

Region 9

Duncan 19,718
Lawton 74,470
Purcell 4,076

Region 10

Elk City 7,323
Hobart 4,638
Weatherford 7,959

Region 11

Guymon 7,674
Woodward 9,412

APPENDIX B
DELPHI INSTRUMENTS



OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

January 9, 1974

MEMORANDUM

TO: Information Needs Study Participants
FROM: Francis Tuttle, State Director
SUBJECT: Delphi

The Oklahoma State Department of Vocational and Technical Education is constantly striving to improve its training for employment of the state's youth and adults. In order to do this in the most efficient manner, it is necessary that we provide full information about vocational and technical education to the general public. If this is to be done, we must determine the areas of interest which Oklahoma's citizens have in vocational education.

It is for this reason that I am asking your assistance in helping us determine the information needs of the public as they relate to vocational education. You have been selected to serve as a member of the Delphi committee. This committee will aid us in identifying the types of information which should be supplied in order to fully inform the citizenry of the state. This will require only a small amount of time to respond to three mailings which we will send you. This system is more fully explained in the materials which accompany this letter to you. It is our hope that you will participate fully in this research project and that you will give us the benefit of your thinking.

Thank you for your time and effort and let me assure you that the information we receive will be confidentially and wisely used.

WWS/XID-01/6



OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

January 9, 1974

MEMORANDUM

TO: Information Needs Study Participants

FROM: Bill Stevenson, Head, Division of Research, Planning, and Evaluation

SUBJECT: Delphi Correspondence Sheet No. 1

The Oklahoma State Department of Vocational and Technical Education is currently planning its information dissemination system for vocational and technical education in the coming years. In an attempt to determine the types of information in which Oklahoma citizens have an interest, we are asking that selected individuals throughout the state indicate to us what it is they would like to know about vocational education.

The Delphi technique has been chosen as the method to be used in obtaining the factors to examine for possible use in our information dissemination process. This technique, which is built on the strength of informed, sound judgment, is intended to get opinions from persons without bringing the individuals together in any kind of face-to-face confrontation. Successive questionnaires and feedback are necessary for each round designed to produce more carefully considered group opinions. Three separate mailings to you will be used by the State Department of Vocational and Technical Education to gather and finalize your opinions.

Correspondence

No. 1
(Attached)

Requests that you list ten questions or areas of information which the State Department of Vocational and Technical Education should answer in order to fully inform the public about vocational education.

Correspondence

No. 2

A list of information needs will be compiled from the participants' responses and mailed back to you. Using this list each person will be asked to evaluate and rank each item by such criteria as importance, feasibility, probability of success, etc.

Correspondence

No. 3

A list of priority information needs will be compiled from the consensus obtained in Step 2. Each participant will be asked to either revise their opinions in line with the priority list developed in Step 2 or specify their reasons for remaining outside the consensus.

From the response obtained in Step 3, a final list of priority information needs will be incorporated into the total information dissemination process for Oklahoma's Vocational and Technical Education Program.

We hope you will agree to participate with us in this effort to provide a well-rounded education to all of Oklahoma's citizens. If you are willing to assist us, please complete the attached instrument and return in the enclosed self-addressed stamped envelope. Thank you very much for your assistance.

Enclosure

WWS/XID-02/6

INFORMATION NEEDS STUDY

State Department of Vocational and Technical Education
Stillwater, Oklahoma

Correspondence Sheet No. 1

(Please return immediately in enclosed envelope)

Please list up to ten questions which you feel the public would like to have answered about vocational and technical education in Oklahoma.

EXAMPLE: A possible question might be "How many students are enrolled in vocational education in secondary schools in Oklahoma?"

or

"What is the main purpose of vocational education in Oklahoma?"

List your questions below.

No. 1

No. 2

No. 3

No. 4

No. 5

No. 6

No. 7

No. 8

No. 9

No. 10

40

**INFORMATION NEEDS STUDY
CORRESPONDENCE SHEET NUMBER 2
OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION**

(Please return immediately in enclosed envelope)

Below in the left hand column are the combined concepts that you and others suggested the public needs to know about vocational and technical education in Oklahoma.

In the middle column we are asking you to rank each concept on an 11-point continuum ranging from most important (1) to least important (11) in order that a priority can be determined on those kinds of information most essential to be publicized. Please be selective in choosing those concepts you consider most important.

In the right hand column, please check all the levels of information you feel the public needs, i.e., statewide, local, general, and specific information. Check as many as are appropriate for each concept.

EXAMPLE:	Place (x) in appropriate section Rank of Concepts	Level of Information			
<u>Information Concept</u>	Most Important 1 2 3 4 5 6 7 8 9 10 11 Least Important	State	Local	General	Specific
X. Vocational graduate follow-up.	/ / / <u>X</u> / / / / / / / / /	X	X		X
Y. Vocational teacher evaluation.	/ / / / / / / / <u>X</u> / / /	X		X	

The response to concept X indicates it is of relatively high importance and information should be supplied concerning specific vocational graduates locally and across the state.

The response to concept Y indicates it is of moderately low importance and accumulated (general) statewide data would be sufficient for public use.

INFORMATION ABOUT:	Most Important 1 2 3 4 5 6 7 8 9 10 11 Least Important				
1. Job placement services.	/ / / / / / / / / / /				
2. Location of schools offering vocational training.	/ / / / / / / / / / /				
3. What vo-tech courses or programs are offered and when.	/ / / / / / / / / / /				
4. Costs of vocational training to students.	/ / / / / / / / / / /				
5. Entrance and enrollment requirements of vo-tech programs.	/ / / / / / / / / / /				

	Most Important	Least Important	State	Local	General	Specific
6. Funding, financing, and cost of vo-tech education to the taxpayer.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
7. Curriculum content in vo-tech programs.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
8. Effectiveness of vo-tech programs in terms of student success.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
9. Vo-tech program contribution to graduation, certification and licensure of students.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
10. State and community benefits from vo-tech training.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
11. Vo-tech training as an alternative to a college degree.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
12. Comparisons of Oklahoma vo-tech programs with other states.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
13. Transportation to Area Vocational-Technical Schools.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
14. Administrative structure of vo-tech education.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
15. Definition and main purpose of vo-tech education.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
16. Financial assistance for vo-tech students.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
17. Qualifications and Certifications of vo-tech teachers.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
18. Length of programs and other completion requirements.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
19. Interactions between business, industry, and vo-tech education.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
20. Cooperative or on-the-job training opportunities.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
21. Level of job skills learned in vo-tech training.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				
22. Economic and other benefits to students of vo-tech programs.	/ / / / / / / / / / / /	1 2 3 4 5 6 7 8 9 10 11				

	Most Important	Least Important	State	Local	General	Specific
23. Bases for adding or dropping vo-tech programs.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
24. Impact of career education on vo-tech education.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
25. Vo-tech programs for the handi-capped, retarded, disadvantaged minority students and dropouts.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
26. Availability of student housing at vo-tech schools.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
27. Mobility of vo-tech students.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
28. Numbers and types of students in vo-tech programs.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
29. Vocational counseling and student decisions.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
30. Vo-tech information and Public Relations.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
31. Job supply and demand.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
32. Relationship between vo-tech and other public education.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
33. Adult vocational education.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
34. Policies regarding vo-tech education and its relationship to other education.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
35. Resources needed to improve vo-tech education.	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
Add and rate any additional general concepts you believe have been omitted.						
_____	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
_____	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					
_____	/ / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11					



OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

November 13, 1974

Participant
Delphi Technique

This is the third and final instrument of the Delphi Technique relating to what the public needs to know about vocational and technical education. A ranking of factors is presented as the last step in the enclosed instrument sheet to complete your participation in the Technique. We would like to have your comments by November 22.

On behalf of the State Department of Vocational and Technical Education, I would like to express our gratitude to you for all the effort you made in the past few months to make this study a success.

If you would like a copy of the report, please indicate such on the enclosed form.

Sincerely,

Bill Stevenson, Head
Division of Research,
Planning and Evaluation

Enclosure

BD/XJS-01/9

CORRESPONDENCE SHEET NO. 3
(TO BE ENCLOSED IN THE RETURN MAIL)

In Correspondence Sheet Two you ranked the following information concepts in terms of their importance to be publicized. Your responses to each information concept have been averaged; a low average indicates that it is important to publicize this type of information. A high average indicates that it is not very important to publicize this type of information.

The information concepts have been arranged in rank order; the most important type of information is first in the list. This list of information concepts will be used to establish a set of priorities, however, we need to know if you think this ranking is accurate. If you think a concept should be ranked significantly more or less important, please list the rank number on the last page, and indicate why you think the concept should be placed higher or lower in priority. If you are in general agreement with the priority list as it stands, then do nothing to the list. In either case please return this correspondence sheet to us as soon as possible.

Rank No.	Factor	Group Average
1.	What vo-tech courses or programs are offered and when.	2.27
2.	Job placement services.	2.68
3.	Job supply and demand.	2.77
4.	Adult vocational education.	3.19
5.	Vo-tech programs for the handicapped, retarded, disadvantaged minority students and dropouts.	3.33
6.	Cooperative or on-the-job training opportunities.	3.41
7.	Entrance and enrollment requirements of vo-tech programs.	3.45
8.	Financial assistance for vo-tech students.	3.62
9.	Location of schools offering vocational training.	3.63
10.	Costs of vocational training to students.	3.85
11.	Level of job skills learned in vo-tech training.	3.89
12.	Economic and other benefits to students of vo-tech programs.	3.93
13.	Resources needed to improve vo-tech education.	4.11
14.	State and community benefits from vo-tech training.	4.12
15.	Interactions between business, industry, and vo-tech education.	4.14
16.	Effectiveness of vo-tech programs in terms of student success.	4.15
17.	Vocational counseling and student decisions.	4.21
18.	Curriculum content in vo-tech programs.	4.27
19.	Vo-tech training as an alternative to a college degree.	4.38
20.	Definition and main purpose of vo-tech education.	4.40
21.	Length of programs and other completion requirements.	4.51

Rank No.	Factor	Group Average
22.	Qualifications and Certifications of vo-tech teachers.	4.69
23.	Vo-tech program contribution to graduation, certification and licensure of students.	4.73
24.	Relationship between vo-tech and other public education.	4.89
25.	Vo-tech information and Public Relations.	5.12
26.	Impact of career education on vo-tech education.	5.28
27.	Policies regarding vo-tech education and its relationship to other education.	5.80
28.	Bases for adding or dropping vo-tech programs.	5.86
29.	Funding, financing, and cost of vo-tech education to the taxpayer.	5.89
30.	Availability of student housing at vo-tech schools.	5.99
31.	Transportation to Area Vocational-Technical Schools.	6.19
32.	Mobility of vo-tech students.	6.86
33.	Comparisons of Oklahoma vo-tech programs with other states.	7.11
34.	Administrative structure of vo-tech education.	7.11
35.	Numbers and types of students in vo-tech programs.	7.13

Write the rank number and the justification for ranking the concept higher or lower. Use back of pages for extra space.

Rank No. _____
Reason for Ranking Change:

Rank No. _____
Reason for Ranking Change:

I wish to receive a copy of the report when completed. YES _____ NO _____

Name _____

Address _____

APPENDIX C

DELPHI III RESPONSES

DELPHI III RESPONSES

Respondents were asked to indicate disagreement with group rankings of the information factors by listing factors they thought should have a higher or lower priority and indicating their rationale. Responses summarized below are from nine respondents.

More Important Factors

<u>Rank and Factor</u>	<u>Rationale</u>
6 Cooperative or on-the-job training opportunities	Meeting and satisfying the customers is one-half or more in winning the battle.
14 State and community benefits from vo-tech training	Important to local voters, especially those who have trouble finding and holding good employees. The more publicity you give to benefits to the community, the more community support you will get.
15 Interactions between business, industry, and vo-tech education	Important to local voters, especially those who have trouble finding and holding good employees.
16 Effectiveness of vo-tech programs in terms of student success	This suggests a comparison which would be more acceptable to the public than #11, Level of job skills learned.
17 Vocational counseling and student decisions	Move to #4--relate abilities to job demand. Rank 6 or 7--Students need guidance and counseling before they read through the publicity releases down to #17. Concern with better attitude toward work.
18 Curriculum content in vo-tech programs	Concern with better attitude toward work. Belief that the general public would prefer it be a high priority. Important to prospective employers what the student has been taught.
19 Vo-tech training as an alternative to a college degree	No reason
20 Definition and main purpose of vo-tech education	I think it very important.
24 Relationship between vo-tech and other public education	Of great interest to people in education.
27 Policies regarding vo-tech education and its relationship to other education	Of great interest to people in education.

29 Funding, financing, and cost of
vo-tech education to the taxpayer

For good will and support get these facts
out right after #14.

Funding is #1 problem and should be
in top five priorities.

This will be of more than casual interest
to the voter.

30 Availability of student housing at
vo-tech schools

Might influence a student to enroll.

31 Transportation to Area
Vocational-Technical Schools

Might influence a student to enroll. A
factor in persons' possible attendance in
a vo-tech program.

Less Important Factor

8 Financial assistance for vo-tech
students

Question its influence on the mill levy
vote to fund a school.

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